

# TEST REPORT

The following tested product(s) were submitted and identified by the vendor as:

Applicant : HK Lighting Group  
Address of Applicant : 3529 Old Conejo Road, Suite 118, Newbury Park, CA  
91320  
Testing Laboratory : SGS Taiwan Ltd., Optics Laboratory  
Laboratory Address : No. 33, Wu Chyuan Road, New Taipei Industrial Park, Wu  
Ku District, New Taipei City 24886, Taiwan (R.O.C.)  
Product Name : LED Lighting  
Model / Serial Number : ZXL08-S  
Manufacturer : HK Lighting Group  
Test Standard/Method : According to Client's Methods  
Rating : AC 12 V 50 / 60 Hz, 2 W  
Tested Condition : AC 12 V 60 Hz  
Date of Issue : Nov. 07, 2016

- ◆ The test results are solely accountable for the testing samples.
- ◆ All reported contents shall not be used for advertising, publication, marketing strategies and legal proceedings.
- ◆ Excerpts taken from the report will not be valid unless otherwise stated in the laboratory agreement.

Test Results : -PLEASE SEE ATTACHED SHEETS-

**Signed for and on behalf of  
SGS TAIWAN Ltd.**

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Willie Yu  
Sr. Engineer

**1 DATE OF RECEIPT OF TEST ITEM**

Nov. 01, 2016

**2 DATE(S) OF PERFORMANCE OF THE TEST**

Nov. 01, 2016 ~ Nov. 07, 2016

**3 IDENTITY OF SAMPLES**

Quantity	Model	Serial Number
1	ZXL08-S	# 1

**4 TEST ITEMS****4.1 Total Luminous Flux ( $\psi_v$ )**

The test results were implemented referring to Clause 6.3 Luminous flux measurements on luminaires of Clause 6 PHOTOMETRIC METHODS AND PRACTICAL TEST PROCEDURES of CIE 121-1996.

**4.2 Electrical Quantities**

The test results were implemented referring to CIE 121-1996 THE PHOTOMETRY AND GONIOPHOTOMETRY OF LUMINAIRES.

**4.3 Luminous Intensity Distribution**

The test results of luminous intensity distribution were implemented referring to Clause 6.2 Luminous intensity distribution measurements of Clause 6 of CIE 121-1996, and CIE 70-1987 THE MEASUREMENT OF ABSOLUTE LUMINOUS INTENSITY DISTRIBUTIONS.

**4.3.1 Polar Luminous Intensity Distribution****4.3.2 Cartesian Coordinates Luminous Intensity Distribution****4.3.3 Maximum Intensity****4.3.4 AAI Figure**

## 5 TEST CONDITIONS

### Main Test Equipment:

Name	Brand	Model	S/N	Calibration Due Date
Digital Power Meter / AC Source	YOKOGAWA / apc	WT-310 / AFC-500W	C2PK22023V / F312120079	2017/8/18
Goniophotometer System	SGS Define (CZIBULA & GRUNDMANN GMBH / everfine)	GO-R5000-GS-PLUS	1001001	2017/1/31

### Environmental Conditions:

Ambient temperature: (25 ± 1) °C  
Relative humidity: (60 ± 20) %RH  
Dark Room: < 0.05 lx

### DUT Conditions:

Power Input: AC 12 V 60 Hz  
Warm up time: > 60 minutes  
Dimension: ∅ 30 mm x L 155 mm

### Measurement Conditions:

Orientation: Downward  
Goniophotometer: 2.115 m (N.F.)

**6 TEST RESULTS**

6.1 Total Luminous Flux ( $\psi_v$ )

S/N	Total Luminous Flux	Note
# 1	91.950 lm	Stabilization

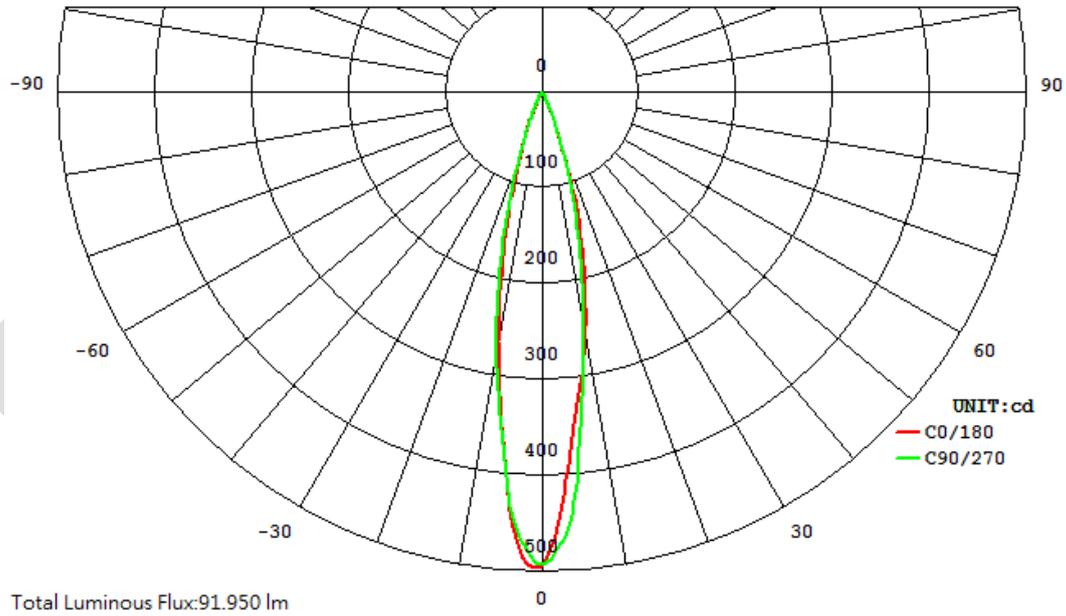
6.2 Electrical Quantities

S/N	Input Voltage	Input Current	Input Power	Power Factor	Note
# 1	12.003 Vac	0.2628 A	2.0344 W	0.6448	Stabilization

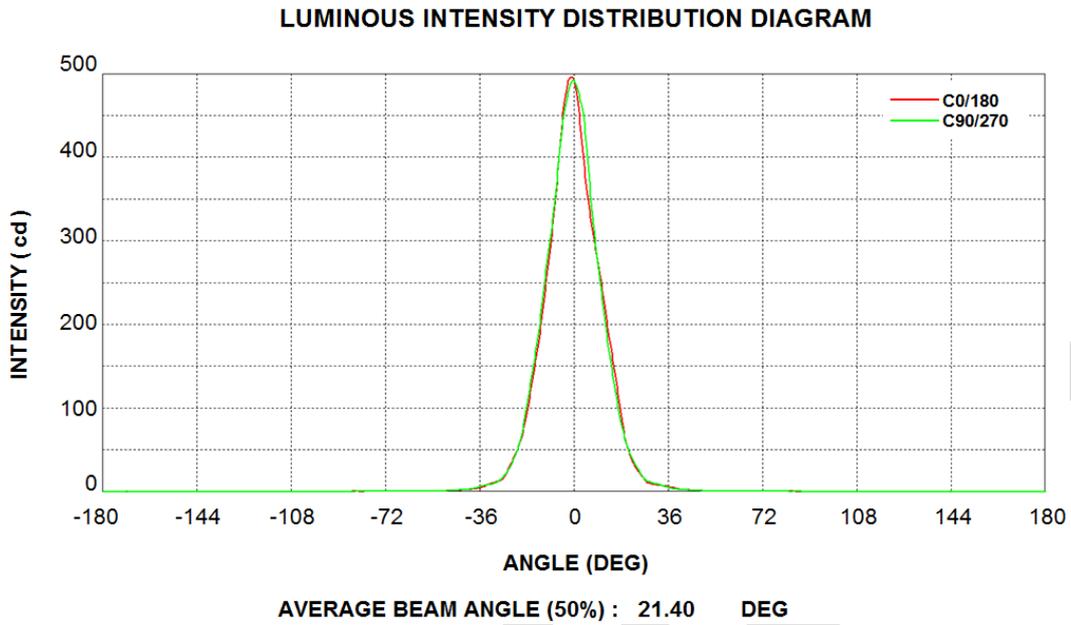
6.3 Luminous Intensity Distribution

6.3.1 Polar Luminous Intensity Distribution

Polar Luminous Intensity Distribution



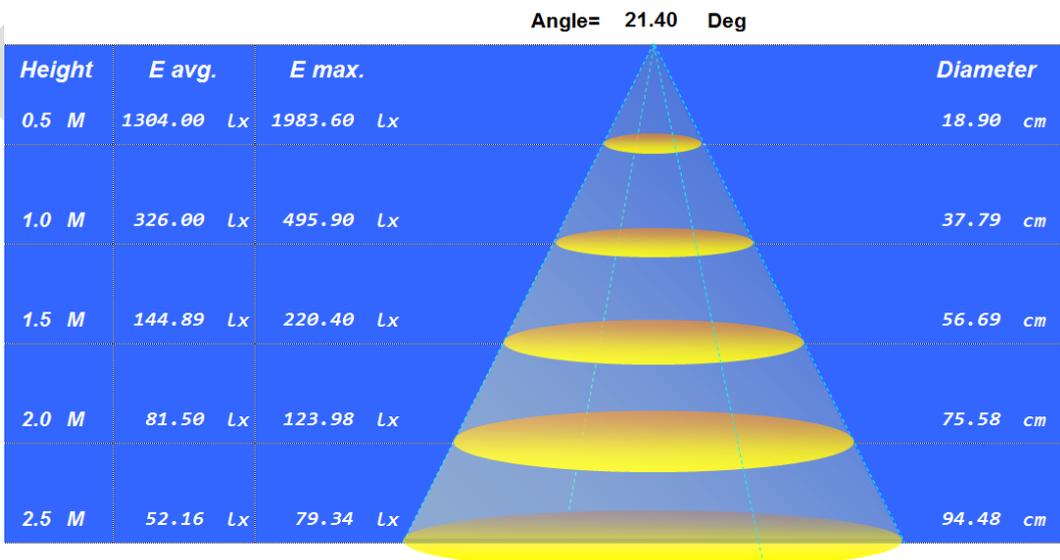
### 6.3.2 Cartesian Coordinates Luminous Intensity Distribution

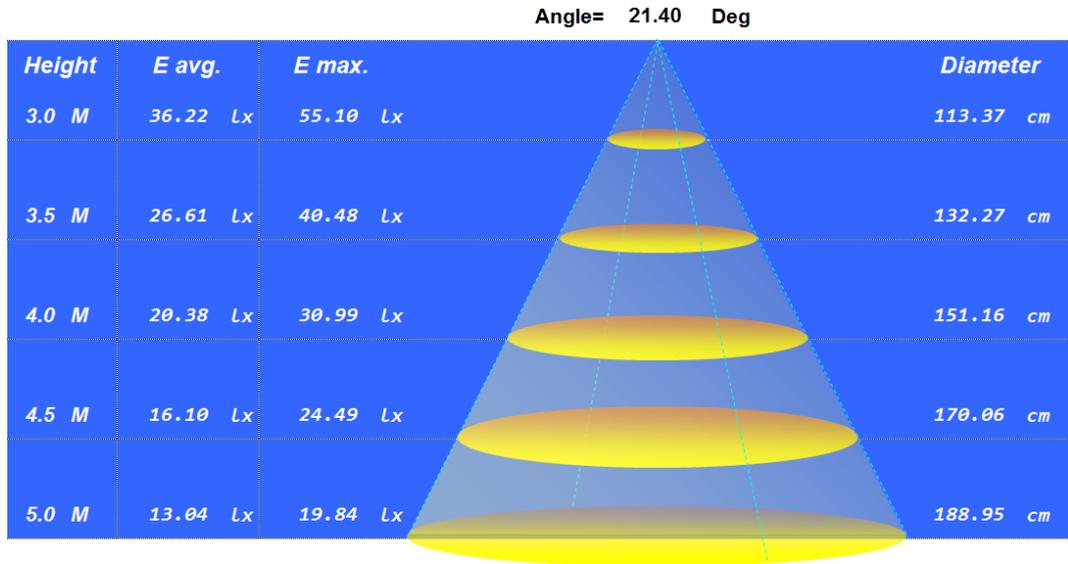


### 6.3.3 Maximum Intensity

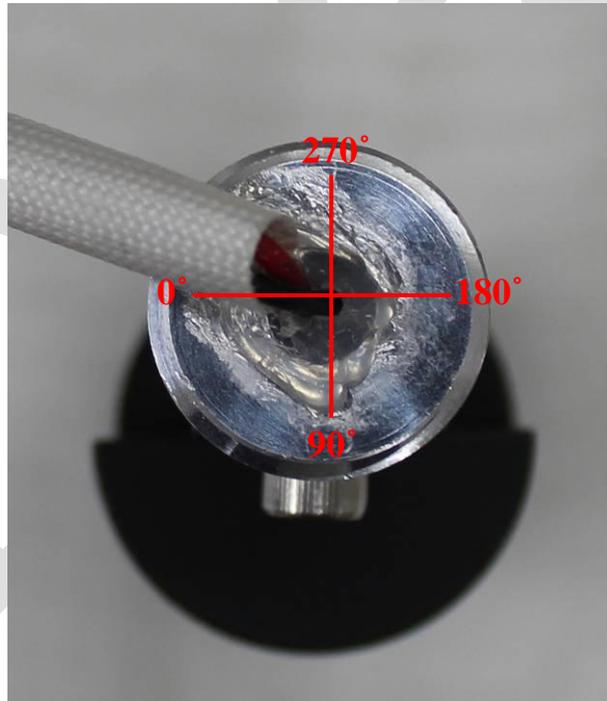
S/N	Maximum Intensity	Note
# 1	496.86 cd	max. intensity @ (C=200°, Gamma=1.0°)

### 6.3.4 AAI Figure



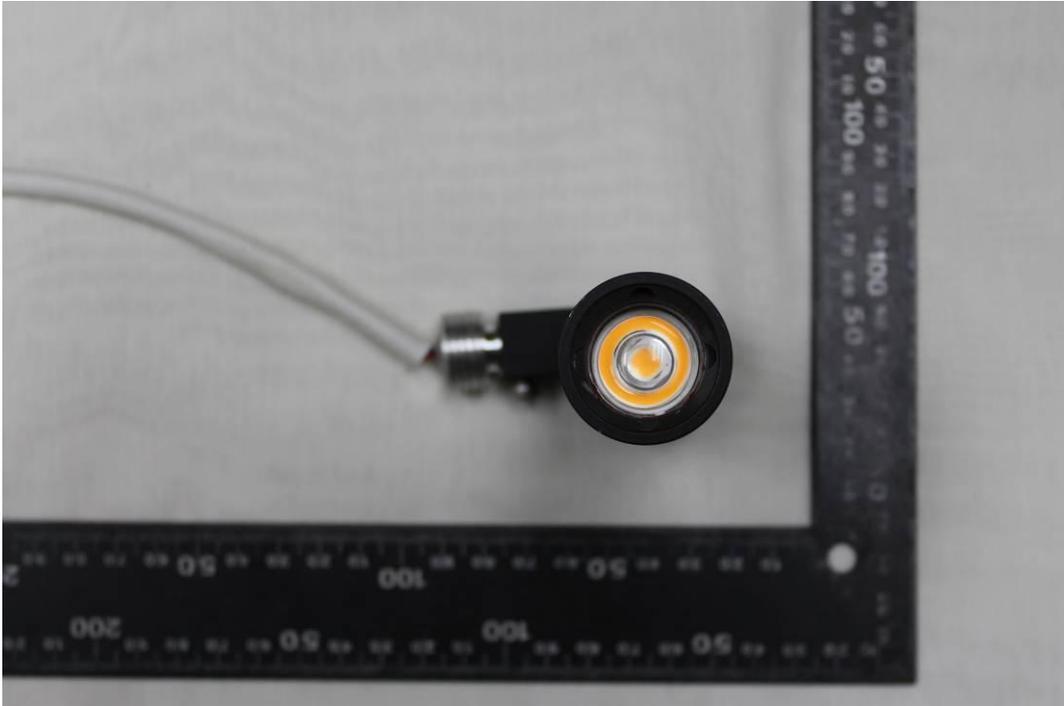


**7 ANGLE DEFINITION**

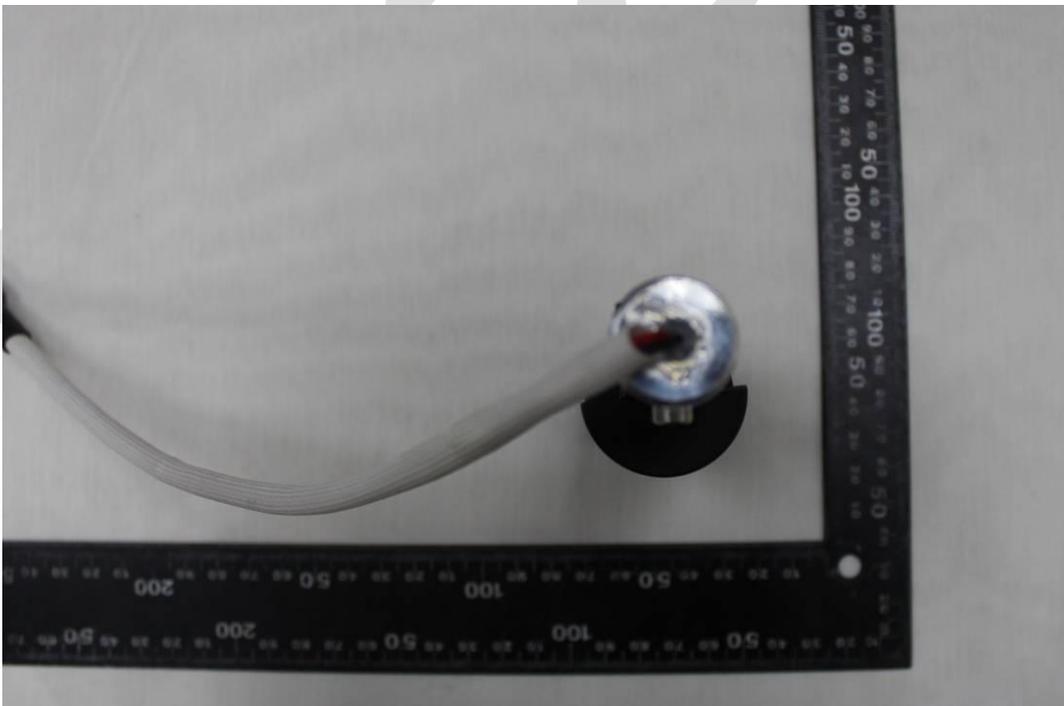


Back View

**8 PHOTO**



Front View



Back View



Side View



DUT

- End of Report -